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**Park et al.**

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[54] **ERROR PROTECTION METHOD FOR MULTIMEDIA DATA**

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#### [57] ABSTRACT

An error protection method for multimedia improves data recovery and channel throughput in channels which cause a random error and a burst error by using a rate compatible punctured convolutional code (RCPC) and an automatic retransmission on request (ARQ). In a process of decoding a plurality of packets of given information, the error protection method includes the steps of a) decoding one of the plurality of packets, b) decoding another packet when an error occurs during the decoding in step a), c) decoding a combination of the packets from steps a) and b) or a third packet when an error occurs in step b), and d) repeating step c) until the decoding error no longer occurs. The error protection method has the characteristics of both Type-1 and Type-2 ARQ methods. Therefore, one can obtain constant channel throughput in a channel containing burst errors, a channel containing random errors, and a channel in which the two types of error patterns coexist simultaneously.

14 Claims, 3 Drawing Sheets

